

Nalco Docket No. 7773
Customer No. 49459

REMARKS

Reconsideration in view of the following remarks and declarations submitted herewith is respectfully requested. Applicants have reviewed the Office Action and respectfully assert that this paper is responsive to all points raised therein.

The Office Action issued the following rejections:

- (a) Claims 1 to 4, 6 to 8, 13, 15 to 18, 20, and 21 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,556,932 to Coscia et al. ("Coscia") as evidenced by U.S. Patent No. 6,083,348 to Auhorn et al. ("Auhorn").
- (b) Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Coscia in view of U.S. Patent No. 6,315,866 B1 to Sanchez ("Sanchez");
- (c) Claims 9, 10, 22, and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coscia as evidenced by U.S. Patent No. 5,571,380 to Fallon ("Fallon");
- (d) Claims 11 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coscia in view of U.S. Patent No. 5,654,198 to Carrier et al. ("Carrier");
- (e) Claims 1 to 4, 6 to 10, 13, 15 to 18, and 20 to 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,077,394 to Spence et al. ("Spence") in view of U.S. Patent No. 5,674,362 to Underwood et al. ("Underwood") and further in view of Coscia as evidenced by Auhorn; and
- (f) Claims 11 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Spence in view of Underwood and further in view of Coscia and even further in view of Carrier.

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OATH/DECLARATION

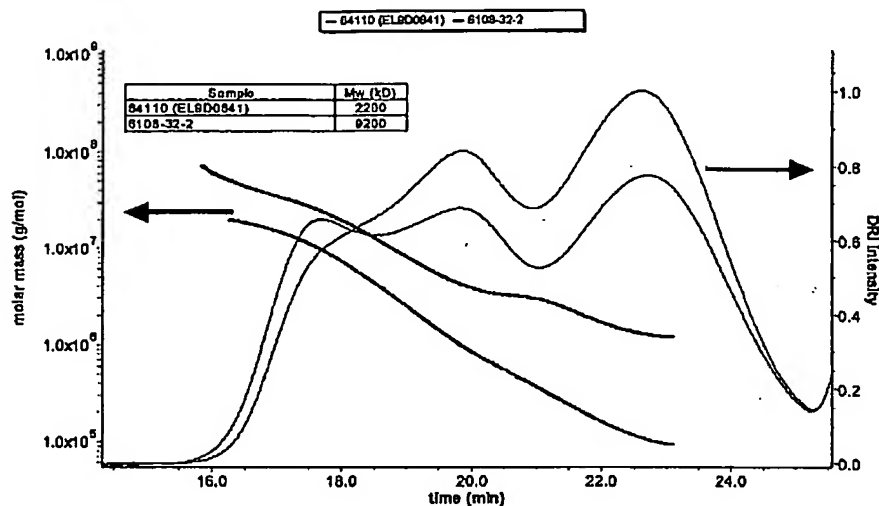
The Examiner refers to the Declaration of Laura C. Copeland as Declaration A, and to the Declaration of Michael R. St. John as Declaration B. Several points are alleged in the Office Action as to the insufficiency of these Declarations. Applicants respectfully disagree with these allegations and submit that the Declarations set forth with requisite specificity the characteristics of the compared polymers.

On Page 4 of the Office Action, the Examiner states, "The molecular weights of the polymers are unknown. The composition of the comparative polymer from Coscia et al is also unknown. Overall, the Declarations discuss and compare the results of polymers of unknown composition drawn from a prior art disclosure." Applicants respectfully assert that the point of contention lies in the mole percent of functionalized amino or amido groups in the polymer. The claimed molecular weight of the functionalized polymer is not at issue. Declaration B set forth specific details with respect to the functionalization of the tested polymers and used those details to argue that the press dewatering activity observed with the claimed polymers was unexpected. Moreover, Declaration A set forth commercial success data establishing a nexus between that success and the claimed invention. That Declaration B meets the requirements delineated by the Federal Circuit to establish that nexus was set forth in Applicants' response to office action of December 12, 2008.

Nonetheless, Applicants provide below further proof that the polymers described in Declaration A and Declaration B are with the scope of the claims. The molecular weight average molecular weight of the tested polymers was at least about 300,000 g/mole, as required by Claim 1. Both the "Fresh" and "Aged" batches of polymer meet this claim limitation. The figure below shows the molecular weight (in kD) of "Sample D" of Declaration B.

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GPC/MALLS for 64110 [0.8 glyoxal/AcAm mole ratio] - Fresh
[64110(EL9D0641)] and Aged [6108-32-2]



In addition, the Examiner states, "The amount of unreacted glyoxal is not claimed." To further prosecution of this Application, Applicants have amended Claim 1 so that the composition added to the paper sheet includes at least about 60 mole percent unreacted aldehyde. Applicants therefore respectfully request that the Examiner reconsider the previously submitted Declarations.

CLAIM REJECTIONS

The Office Action rejected Claims 1 to 4, 6 to 8, 13, 15 to 18, 20, and 21 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over Coscia as evidenced by Auhorn. Applicants have amended Claim 1 to further prosecution of this Application.

Applicants respectfully assert that Coscia does not disclose, teach, or suggest the claimed invention. Coscia fails to disclose, teach, or suggest any method of enhancing the press section dewatering of a paper sheet on a paper machine. Instead, Coscia discloses a class of polymers useful for enhancing the temporary wet strength of tissue and towel grades of paper. (col. 2, lines 33 to 40). In no way does Coscia disclose the use of any polymers for enhancing the press section dewatering of a paper sheet on a paper machine. In particular, Coscia fails to disclose,

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teach, or suggest the claimed method of enhancing the press section dewatering of a paper sheet on a paper machine comprising adding to the paper sheet a polymer composition comprising (i) one or more aldehyde functionalized polymers comprising amino or amido groups wherein greater than 20 mole percent of the amino or amido groups are functionalized by reacting with one or more aldehydes and wherein the aldehyde functionalized polymers have a weight average molecular weight of at least about 300,000 g/mole and (ii) at least about 60 mole percent unreacted aldehyde.

Therefore, Applicants respectfully assert that Claims 1 to 4, 6 to 8, 13, 15 to 18, 20, and 21 are patentably distinct over Coscia as evidenced by Auhorn and respectfully request that this rejection be withdrawn.

The Office Action also rejected Claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Coscia in view of Sanchez.

Applicants respectfully assert that Claim 5 is patentably distinct over Sanchez because Claim 5 depends from allowable Claim 1. Therefore, Applicants respectfully request withdrawal of this rejection.

The Office Action also rejected Claims 9, 10, 22, and 23 under 35 U.S.C. § 103(a) as being unpatentable over Coscia as evidenced by Fallon.

Applicants respectfully assert that Claims 9, 10, 22, and 23 are patentably distinct over Coscia as evidenced by Fallon because these claims depend from allowable Claim 1. Therefore, Applicants respectfully request withdrawal of this rejection.

The Office Action also rejected Claims 11 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Coscia in view of Carrier.

Applicants respectfully assert that Claims 11 and 12 are patentably distinct over Coscia in view of Carrier because Claim 5 depends from allowable Claim 1. Therefore, Applicants respectfully request withdrawal of this rejection.

The Office Action also rejected Claims 1 to 4, 6 to 10, 13, 15 to 18, and 20 to 22 under 35 U.S.C. § 103(a) as being unpatentable over Spence in view of Underwood and further in view of

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Coscia as evidenced by Auhorn. As stated above, Claim 1 has been amended to further prosecution of this Application.

Applicants respectfully assert that Spence (whether or not in view of Underwood and further in view of Coscia as evidenced by Auhorn) does not teach or suggest the claimed invention. Spence fails to teach or suggest any method of enhancing the press section dewatering of a paper sheet on a paper machine. In no way does Spence disclose the use of any polymers for enhancing the press section dewatering of a paper sheet on a paper machine. In particular, Spence fails to teach or suggest the claimed method of enhancing the press section dewatering of a paper sheet on a paper machine comprising adding to the paper sheet a polymer composition comprising (i) one or more aldehyde functionalized polymers comprising amino or amido groups wherein greater than 20 mole percent of the amino or amido groups are functionalized by reacting with one or more aldehydes and wherein the aldehyde functionalized polymers have a weight average molecular weight of at least about 300,000 g/mole and (ii) at least about 60 mole percent unreacted aldehyde.

Therefore, Applicants respectfully assert that Claims 1 to 4, 6 to 10, 13, 15 to 18, and 20 to 22 are patentably distinct over Spence in view of Coscia as evidenced by Auhorn and respectfully request that this rejection be withdrawn.

The Office Action also rejected Claims 11 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Spence in view of Underwood and further in view of Coscia and even further in view of Carrier.

Applicants respectfully assert that Claims 11 and 12 are patentably distinct over Spence in view of Underwood and even further in view of Carrier because Claims 11 and 12 depend from allowable Claim 1. Therefore, Applicants respectfully request withdrawal of this rejection.

RESCISSION OF PREVIOUS ARGUMENT

In the Response to Office Action submitted by Applicants on August 23, 2006, in reply to the Office Action of April 27, 2006, Applicants amended the following element of Claim 1: "0.05 lb/ton to about 15 lb/ton" was amended to "0.05 lb/ton to about 3 lb/ton." Applicants reverted this element of Claim 1 to the original range of "0.05 lb/ton to about 15 lb/ton" in the

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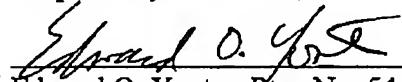
Response to Office Action submitted on February 26, 2007, in reply to the Office Action dated October 27, 2006. Any arguments presented in relation to this element of Claim 1 in the Response to Office Action of August 23, 2006, are hereby rescinded.

CONCLUSION

In view of the foregoing remarks, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. §§ 102(b), and 103(a). Applicants respectfully assert that all pending claims in this Application are in condition for allowance. Should the Examiner have any questions or comments as to form, content, or entry of this paper, or if any further issues yet to be resolved to advance prosecution of this Application to issue, the Examiner is invited to telephone the undersigned counsel.

Entry of this paper and allowance of all pending Claims 1 to 13, 15 to 18, and 20 to 23 is respectfully requested. Applicants earnestly solicit early notice to this effect.

Respectfully Submitted,



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